

A method and system for unloading an IMS database. In a first embodiment, segments in the segment array are stored in an indexed order. In a second embodiment, segments in the segment array are stored in a relative byte address (RBA) order. In both embodiments, either an image copy of an IMS database or an actual IMS database processed sequentially may be utilized. In the first embodiment, a lookup table may be created to include a key value and a segment array location. A segment array may be created to store both the root and child segments from the IMS database. In the second embodiment, a first segment array may be created to store the root segments from the IMS database in a sequential order. Additionally, a second segment array may be created to store the child segments from the IMS database in a relative byte address (RBA) order.

### **REMARKS**

Applicant is in receipt of the Office Action mailed October 22, 2001. Claims 1-52 were pending in the Application. Claims 1-5, 10, 11, 17-22, 27, 28, 34-39, 44, 45, 51 and 52 were rejected. Claims 6-9, 12-16, 23-26, 29-33, 40-43 and 46-50 were objected to, but were stated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully thanks the Examiner for consideration of these claims.

### **Section 103(a) Rejections**

Claims 1-5, 10, 11, 17-22, 27, 28, 34-39, 44, 45, 51 and 52 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Koeppen (U.S. Patent 5,761,667).

Applicant respectfully disagrees that "Koeppen teaches the method of accessing the IMS database" as stated in claims 1, 17, 18, 34, 35, 51 and 52, as "described in col. 4, lines 40-43."

On the contrary, col. 4, lines 40-43 merely refer to two of the possible physical structures for IMS databases. HDAM is for direct access databases (i.e., no index) and HIDAM contains an index for each root. These database types confer no meaning as to how data is accessed or read from the IMS database. An IMS application would retrieve data from either type of database using exactly the same application access or 'call'.

Applicant respectfully disagrees that "Reading blocks from IMS database

sequentially is shown in fig 4A and described in col. 5, lines 5-10.”. Also, applicant respectfully disagrees that “De-blocking the segments is shown in fig 4A, wherein fragmented data is defragmented”.

The Koeppen fig 4A simply shows a hierarchical database, without any actions (e.g., reading, de-blocking) taking place, as noted in col. 2, lines 66-67: “FIG. 4(a) is a high level block diagram of a simple hierarchical database.”. The description in col. 5, lines 5-10 refers to fig 4B. The Koeppen fig 4B shows an IMS database being unloaded into sequential files and then reloaded. The Koeppen unload process reads each database segment using traditional IMS segment retrieval, as noted in col. 2, lines 17-19: “When data is unloaded from a database to a sequential device such as a tape, it is commonly unloaded in hierarchical sequential order.”, and also noted in col. 4, lines 31-33: “As shown in FIG. 4(b), the sequential files are created by hierarchically unloading data from the IMS database.”.

Unloading data in a hierarchical sequential order indicates segment to segment reads (i.e., following segment pointers from block to block, as needed, until all segments for a database record have been retrieved), as opposed to “reading blocks of the IMS database sequentially, block by block,” as noted in claims 1, 18, and 35. Using hierarchical sequential order to unload a database record often results in the same database block being read more than once. The method of unloading data as described in the current application insures that each database block is read only once.

Regarding de-blocking, claims 17, 34, and 51 further describe de-blocking as “extracting the individual IMS segments that are physically contained within the physical block.”. Thus, the current application uses a physical sequential order as opposed to the hierarchical sequential order described in the Koeppen ‘667 patent.

CONCLUSION

Applicants submit the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Conley, Rose, & Tayon, P.C. Deposit Account No. 50-1505/5253-02500/JCH.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Request for Approval of Drawing Changes
- ☐ Notice of Change of Address
- ☐ Check in the amount of \$            for fees (            ).
- ☐ Other:

Respectfully submitted,



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